

WHAT IS CLAIMED IS:

1. A wireless communication system which supplies information data to a wireless client through a wireless data communication network, comprising:

an information source server which includes the information data;

and

a gateway server which is connected to the information source server via a network and selectively connected to the wireless client via the wireless data communication network,

the gateway server comprising:

a font storing unit for storing a font which is used in the wireless client to output the information data;

a font determining unit for determining a font to be stored in the font storing unit; and

a font transferring unit for transferring the determined font to the wireless client,

wherein the gateway server temporarily stores the information data sent from the information source server and sends the information data to the wireless client according to a data reception state of the wireless client concerned with the determined font.

2. The wireless communication system of claim 1, wherein the font determining unit determines the font which corresponds to a language selected in the wireless client.

3. The wireless communication system of claim 1, wherein the gateway server includes an authenticating unit which performs authentication for connecting the wireless client to the gateway server.

4. The wireless communication system of claim 3, wherein the font determining unit determines the font while the authenticating unit

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performs the authentication.

5. The wireless communication system of claim 1, wherein the user control server cooperates with the gateway server.

6. The wireless communication system of claim 3, wherein the font determining unit determines the font by using a user information database which includes at least user information stored in advance to be used in the authenticating unit, correspondence information which represents relationship between the language used by the font determining unit and the font stored to display the information data, and history of determining results of the font determining unit.

7. The wireless communication system of claim 1 further comprising a font server which stores a plurality of candidate fonts used and selected by the font determining unit.

8. The wireless communication system of claim 1, wherein a plurality of candidate fonts used by the font determining unit are stored to be determined as the determined font in the gateway server.

9. The wireless communication system of claim 1, wherein the determined font is a character font used to display.

10. The wireless communication system of claim 1, wherein the determined font is a special font representing a pictogram.

11. The wireless communication system of claim 1, wherein the determined font is a voice font used to output a voice.

12. A method of changing language displayed in a wireless client of a wireless communication system which includes a gateway server connected to the wireless client via a wireless data communication network, comprising, at the gateway server, the steps of:

temporarily storing information data;

sending the information data to the wireless client according to a data reception state of the wireless client;

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determining a font used in the wireless client to output the information data; and

transferring the determined font to the wireless client.

13. The method of claim 12, wherein the font determining step determines the font which corresponds to a language selected in the wireless client.

14. The method of claim 12 further including a step of: performing authentication, at the gateway server, for connecting the wireless client to the gateway server.

15. The method of claim 14, wherein the font determining step determines the font while the authenticating step is performed.

16. The method of claim 14, wherein the authenticating step and the font determining step cooperate with the remaining steps performed at the gateway server.

17. The method of claim 16, wherein the font determining step determines the font and the authenticating step authenticates the user, by using a user information database which includes at least user information which is stored in advance, correspondence information which represents relationship between the language used by the font determining step and the font stored to output the information data, and history of determining results of the font determining step.

18. The method of claim 12, wherein the font is a character font used to display the information data.

19. The method of claim 12, wherein the font is a special font representing a pictogram included in the information data.

20. The method of claim 12, wherein the font is a voice font used to output a voice included in the information data.

21. A wireless client of a wireless communication system which sends information data from an information source server to the wireless

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client via a gateway server, comprising:

a language notifying unit which notifies the gateway server of a language;

a font storing unit which stores a font which is determined based on the language and sent from the gateway server; and

an output unit which outputs the information data from the information source server by using the stored font.

22. The wireless client of claim 21, wherein the font is determined while authentication for connecting the wireless client to the gateway server is performed.

23. The wireless client of claim 21, wherein the font storing unit includes a plurality of storage areas and only a font which has not been stored in the storage areas is newly stored in one of an empty storage areas.

24. The wireless client of claim 21, the font stored in the font storing unit is sent from a font server which stores candidate fonts.

25. The wireless client of claim 21, the font stored in the font storing unit is sent from the gateway server which stores candidate fonts.

26. The wireless client of claim 21, wherein the font is a character font used to display the information data.

27. The wireless client of claim 21, wherein the font is a special font representing a pictogram included in the information data.

28. The wireless client of claim 21, wherein the font is a voice font used to output a voice included in the information data.

29. A gateway server of a wireless communication system which sends information data from an information source server to a wireless client via the gateway server comprising:

a font determining unit which determines a font to be used in the wireless client; and

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a font transferring unit which transfers the determined font to the wireless client.

30. The gateway server of claim 29 further comprising an authenticating unit which performs authentication for connecting the wireless client to the gateway server, wherein the font determining unit determines the font while the authenticating unit performs the authentication.

31. The gateway server of claim 29, wherein the font determining unit determines the font which corresponds to a language selected in the wireless client.

32. The gateway server of claim 29 further including a font storing unit which stores the candidate font.

33. The gateway server of claim 32, wherein the font storing unit includes a plurality of storage areas.

34. The gateway server of claim 29, wherein the font is a character font used to display the information data.

35. The gateway server of claim 29, wherein the font is a special font representing a pictogram included in the information data.

36. The gateway server of claim 29, wherein the font is a voice font used to output a voice included in the information data.

37. A user control server of a wireless communication system which sends information data from an information source server to a wireless client via a gateway server including the user control server comprising:

an authenticating unit which performs authentication for connecting the wireless client to the gateway server;

a font determining unit which determines a font to be used in the wireless client; and

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a font transferring unit which transfers the determined font to the wireless client.

38. The user control server of claim 37, wherein the font determining unit determines the font while the authenticating unit performs the authentication.

39. The user control server of claim 37, wherein the font determining unit determines the font which corresponds to a language selected in the wireless client.

40. The user control server of claim 37, cooperating with the gateway server.

41. The user control server of claim 37, wherein the authenticating unit and the font determining unit determines the font by using a user information database which includes at least user information which is stored in advance, correspondence information which represents relationship between a language and a font used in the language, and history of determining results of the font determining unit.

42. The user control server of claim 37, wherein the candidate fonts are stored in a font server which is connected to the gateway server.

43. The user control server of claim 37, wherein the candidate fonts are stored in the gateway server.

44. The user control server of claim 37, wherein the font is a character font used to display the information data.

45. The user control server of claim 37, wherein the font is a special font representing a pictogram included in the information data.

46. The user control server of claim 37, wherein the font is a voice font used to output a voice included in the information data.

47. A font server of a wireless communication system which sends information data from an information source server to a wireless client via a gateway server to which the font server is connected

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comprising:

a font storing unit which stores a font used to represent the information data in the wireless client; and

a font supplying unit which supplies the font in the font storing unit to the gateway server in response to a request from the gateway server.

48. The font server of claim 47, wherein the font is a character font used to display the information data.

49. The font server of claim 47, wherein the font is a special font representing a pictogram included in the information data.

50. The font server of claim 47, wherein the font is a voice font used to output a voice included in the information data.

51. A recording medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform a method of changing language displayed in a wireless client of a wireless communication system, the method comprises the steps of:

at the gateway server which is connected to the wireless client via the wireless data communication network,

temporarily storing information data;

sending the information data to the wireless client according to a state for data receiving of the wireless client;

determining a font used in the wireless client to output the information data; and

transferring the determined font to the wireless client.

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